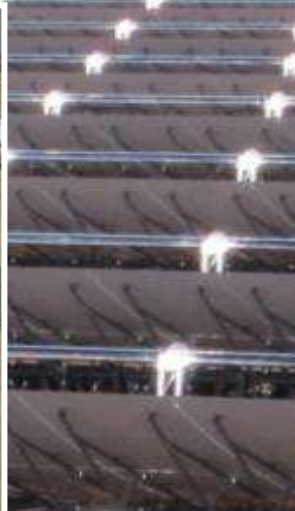




# Solar Thermal Electricity: a vector of development

“Macroeconomic impact of STE Sector in Spain”

*Dr. Luis Crespo, President of ESTELA*



**ESTELA**

Renewable Energy House

Rue d'Arlon 63-67 - B-1040 Brussels - Belgium

Tel.: +32 (0)2 400 10 90 - Fax: +32 (0)2 400 10 91

estela@estelasolar.eu - www.estelasolar.eu



# The Great Value of STE

- ❑ STE is the only dispatchable renewable technology with potential enough to meet the electricity needs worldwide
- ❑ Intermittent RE technologies -which has been largely developed until now- will cover only a minor part of the supply
- ❑ The cost of STE plants will show important reductions when passing from the current 1 GW installed to the current values of Wind (250 GW) and PV (70 GW)
- ❑ Local content of STE plants will be the main drivers behind the support policies in many countries of the sun belt

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Tel.: +32 (0)2 400 10 90 - Fax: +32 (0)2 400 10 91  
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# Macroeconomic Impact of the Solar Thermal Electric Sector in Spain



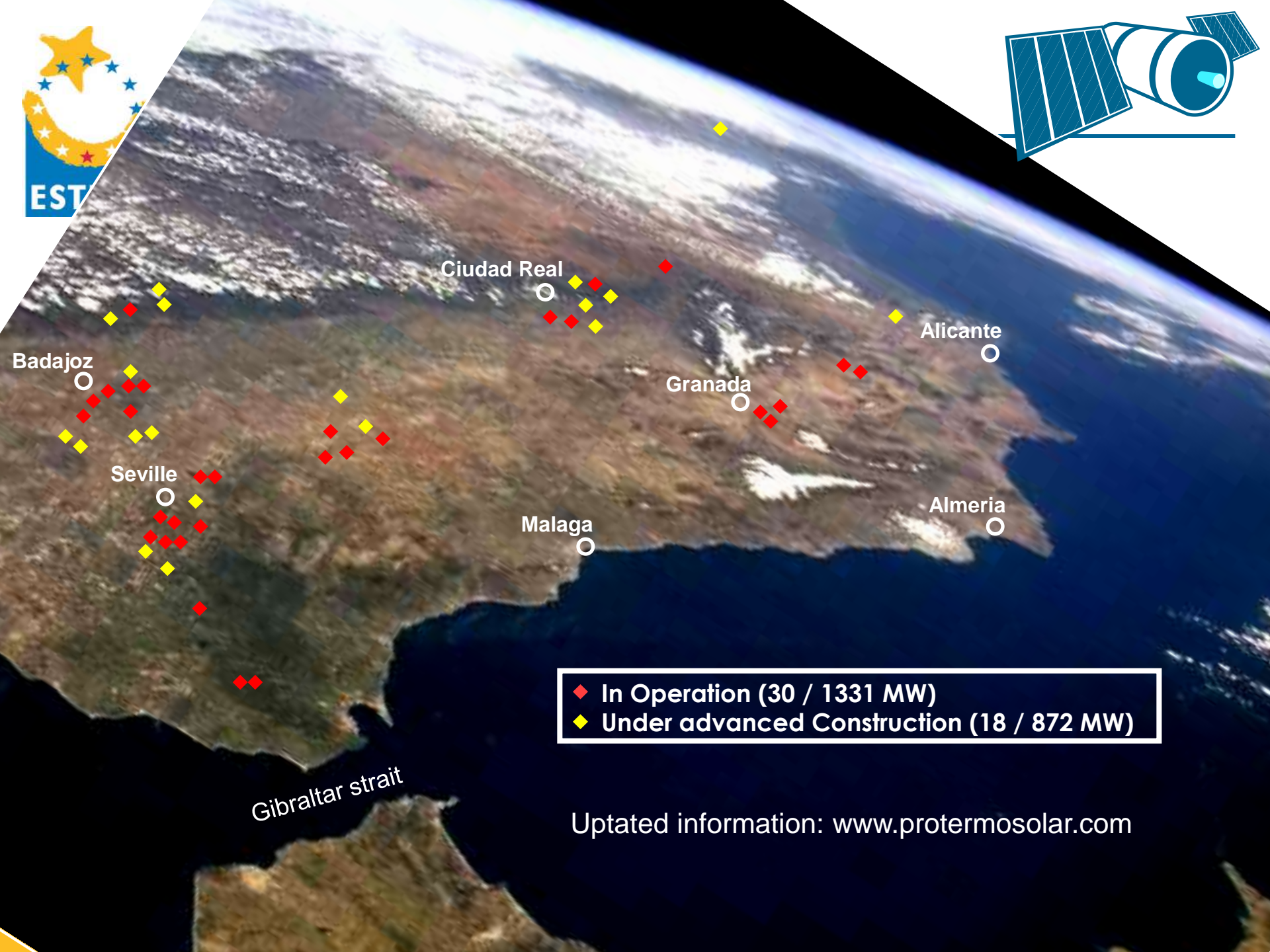
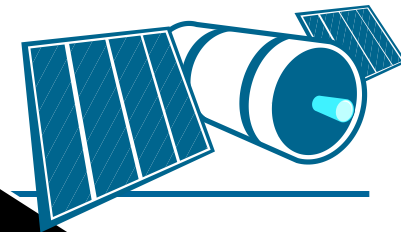
Download: [www.estelasolar.eu](http://www.estelasolar.eu)  
[www.protermosolar.com](http://www.protermosolar.com)

*Available in English and Spanish*

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- ◆ In Operation (30 / 1331 MW)
- ◆ Under advanced Construction (18 / 872 MW)

Uptated information: [www.protermosolar.com](http://www.protermosolar.com)





# TPARABOLIC TROUGH TECHNOLOGY

## EXTRESOL 1 & 2 Badajoz (50 MW, 7 h St.)







# TOWER TECHNOLOGY

GEMASOLAR, Seville (20 MW, 15 h St.)







# FRESNEL TECHNOLOGY

## PUERTO ERRADO 2, Murcia (30 MW)

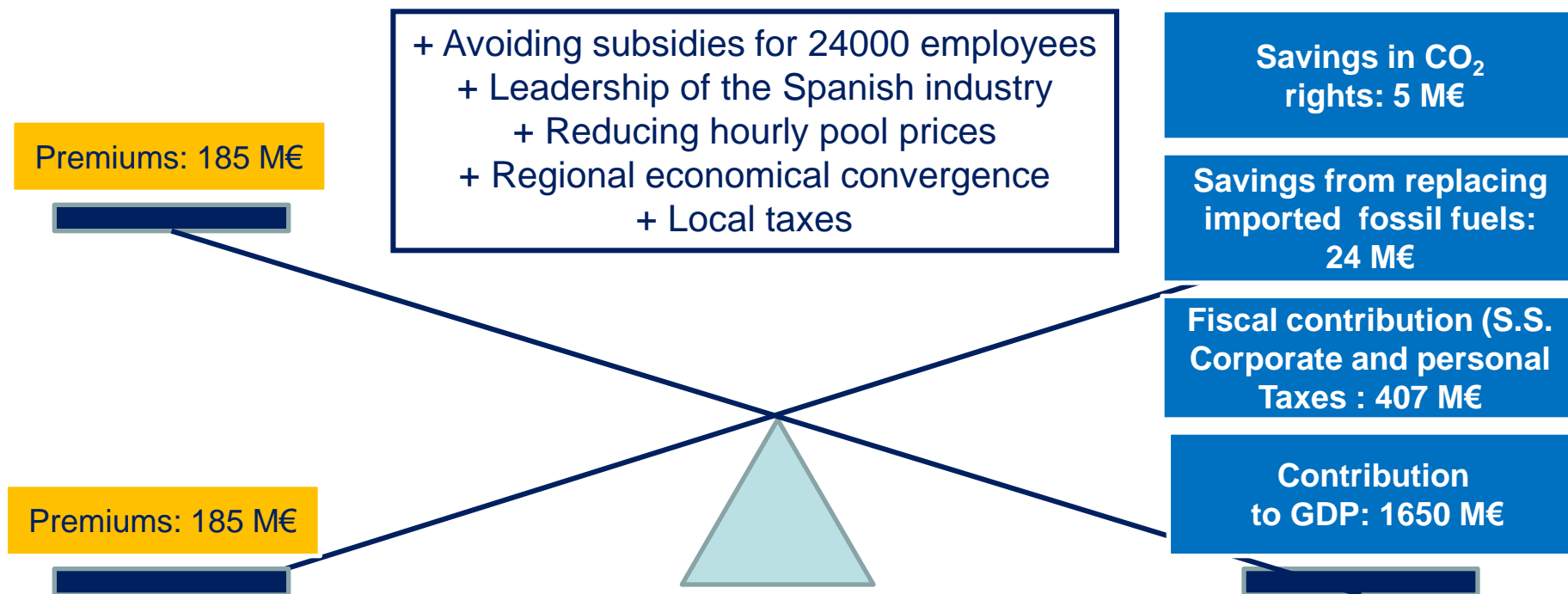


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# Support policy for STE

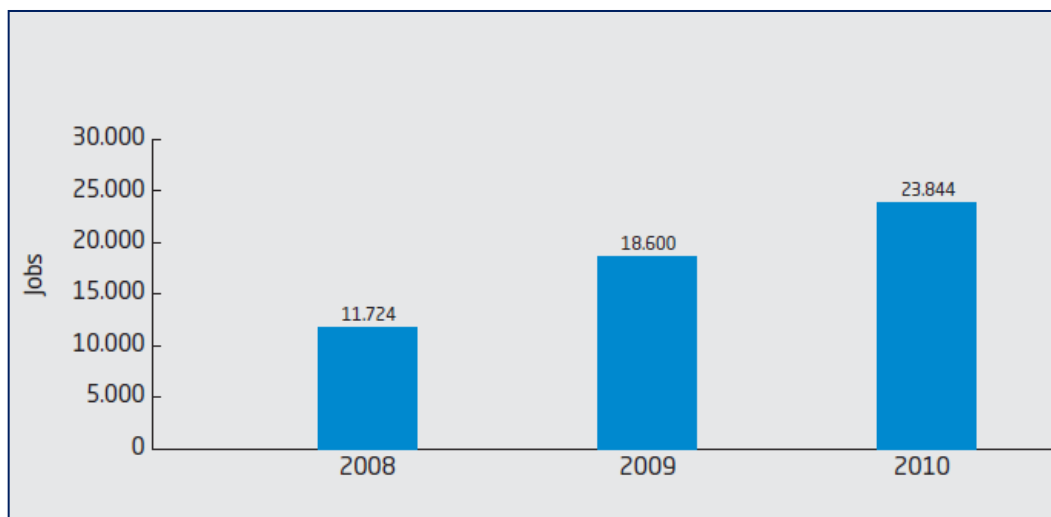
an efficient economic and technological decision for Spain

## 2010 Figures





# STE jobs in Spain



Jobs	2008	2009	2010
<b>Construction</b>	<b>11.713</b>	<b>18.492</b>	<b>23.398</b>
- Plan contracting, construction and assembly	4.399	6.447	8.049
- Components and equipment	4.515	7.442	9.542
- Jobs in the rest of the economy	2.799	4.603	5.807
<b>Power production - O&amp;M</b>	<b>13</b>	<b>123</b>	<b>446</b>
- Plant operation and maintenance	11	108	344
- Jobs in the rest of the economy	2	15	102
<b>TOTAL JOBS</b>	<b>11.724</b>	<b>18.600</b>	<b>23.844</b>



# A very fruitful period in Spain

From the first large plants connected in 2008 till the new ones

Spanish

Foreing

Past situation

Current Capabilities

Technology Development



Component manufacturing



Basic Engineering



Site Development



Project development



EPC



Detailed engineering



Construction



Operation and Maintenance



TOTAL LOCAL CONTENT

50%

80%

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**Job creation and cost reduction potential  
will deserve for STE a relevant share in the future  
electricity generation mix worldwide**

[lcr@estelasolar.eu](mailto:lcr@estelasolar.eu)

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